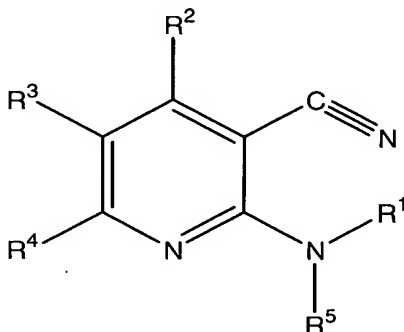


WHAT IS CLAIMED IS:

1. An aminocyanopyridine compound, or a pharmaceutically acceptable salt or tautomer or isomer thereof, the compound having the structure:



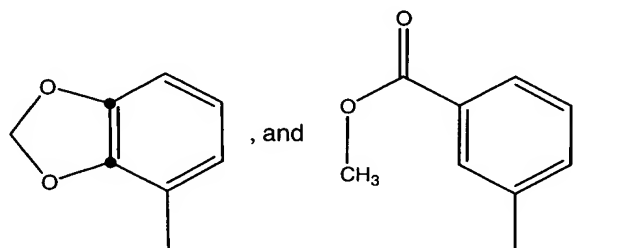
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wherein:

R¹ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ alkylamino, C₁-C₄ alkyl, di-(C₁-C₄ alkyl)amino C₁-C₄ alkyl, C₁-C₄ alkyl-C₁-C₄ alkyl, hydroxy C₁-C₄ alkyl, and aryl C₁-C₄ alkylcarbonyl;

R² is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkylamino, aryl, heteroaryl, heterocyclyl, carboxy, carboxy C₁-C₄ alkyl, C₁-C₄ alkoxy, hydroxy, hydroxy C₁-C₄ alkyl, hydroxy C₁-C₄ alkylamino, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkyl, C₁-C₄ alkoxy C₁-C₄ alkylamino, amino C₁-C₄ alkylamino, aryl C₁-C₄ alkyl, C₁-C₄ alkylamino C₁-C₄ alkyl, di C₁-C₄ alkylamino C₁-C₄ alkyl, C₁-C₄ alkyl C₁-C₄ alkyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkylcarbonyl, phthalamino C₁-C₄ alkyl, halo, carbamyl, C₁-C₄ alkylthio, C₁-C₄ alkoxyarylamino, C₁-C₁₀ mono- and bicyclic cycloalkyl, wherein aryl, heteroaryl, heterocyclyl, mono- and bicyclic cycloalkyl are optionally substituted with one or more of the groups selected from halogen, hydroxy, C₁-C₄ alkoxy, aryloxy, C₂-C₄ alkenyloxy, C₂-C₄ alkynyloxy, C₁-C₄ alkyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, C₁-C₄

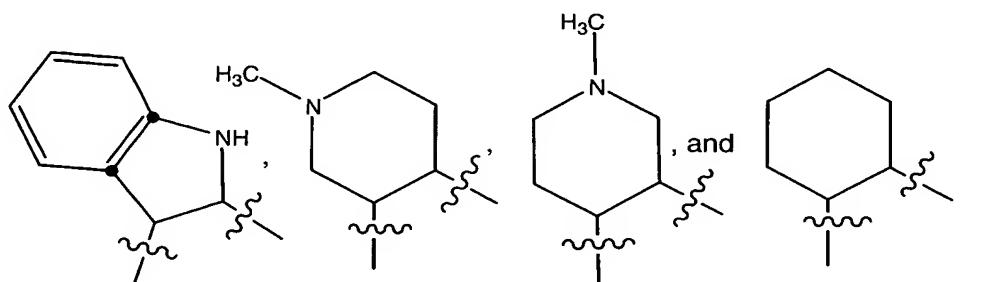
alkoxycarbonyl C₁-C₄ alkoxy, carboxy C₁-C₄ alkoxyamino, C₁-C₄
alkylamino, di-C₁-C₄ alkylamino, *N*-C₁-C₄ alkyl-*N*-cyano C₁-C₄ alkylamino,
nitro, C₁-C₄ alkylcarbonylamino, cyano, halo C₁-C₄ alkyl, di-halo C₁-C₄
alkyl, tri-halo C₁-C₄ alkyl, hydroxy C₁-C₄ alkoxy, halo C₁-C₄ alkoxy, tri-halo
5 C₁-C₄ alkoxy,



with the proviso that when R² is aryl, it is not substituted with nitro;

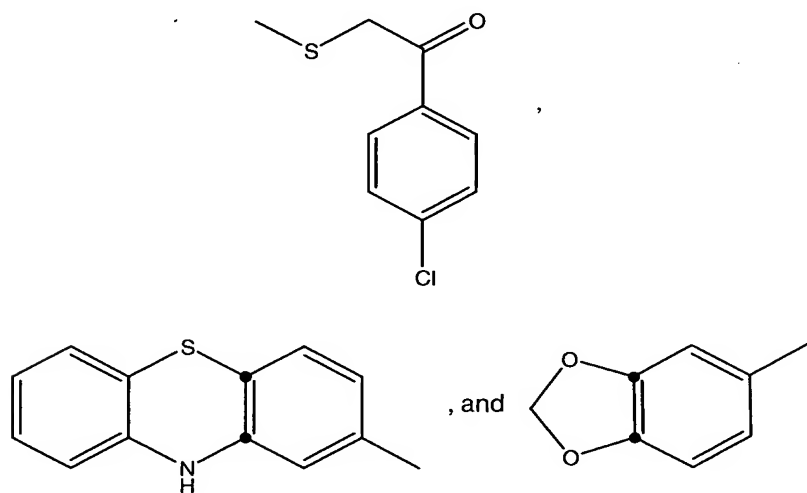
R³ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆
10 alkenyl, C₂-C₆ alkynyl, cyano, amino C₁-C₄ alkyl, amino, aryl, wherein the
aryl group is optionally substituted with one or more group selected from
halogen, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkyl, carboxy, C₁-C₄
alkoxycarbonyl, carboxy C₁-C₄ alkoxy, amino, di- C₁-C₄ alkylamino, *N*-C₁-
C₄ alkyl-*N*-cyano C₁-C₄ alkylamino, nitro, C₁-C₄ alkylcarbonylamino, cyano,
15 halo C₁-C₄ alkyl, di-halo C₁-C₄ alkyl, tri-halo C₁-C₄ alkyl, halo C₁-C₄ alkoxy,
di-halo C₁-C₄ alkoxy, tri-halo C₁-C₄ alkoxy, except that when R² is
heteroaryl, R³ is other than cyano, and

where the R² and R³ groups are such that they optionally join to
form a ring system selected from:

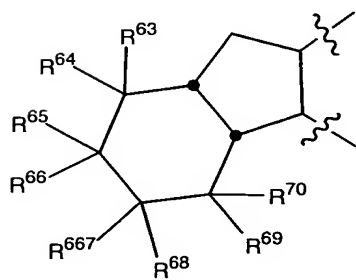
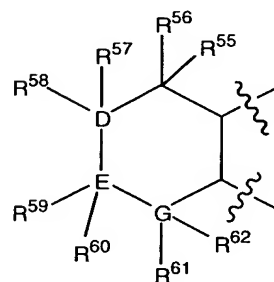
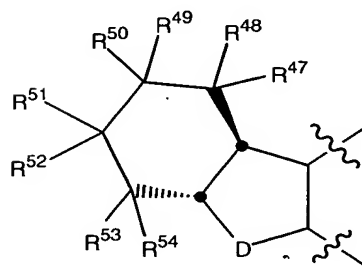
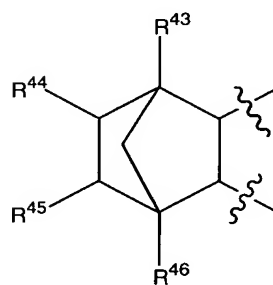
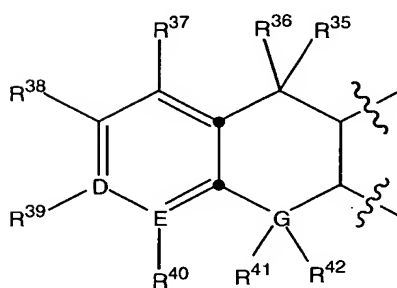
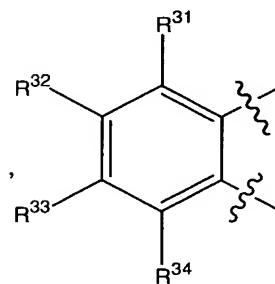
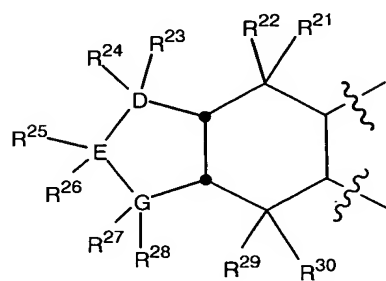
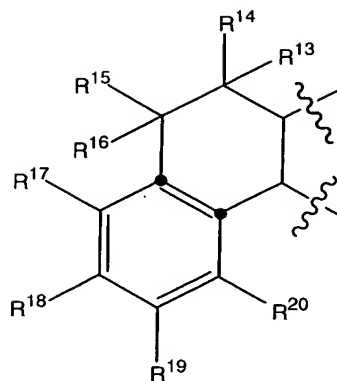
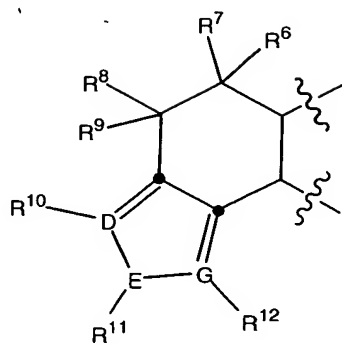


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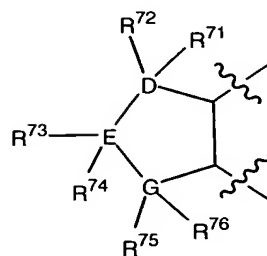
R^4 is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, hydroxy, C₁-C₄ alkylthio, C₁-C₄ alkoxy, C₁-C₄ alkoxycarbonyl, mercapto, *N*-imidazolylphenyl, C₁-C₄ isoalkyl, aminofluorobenzhydryl, aryl and heteroaryl, wherein the aryl and heteroaryl groups are optionally substituted with one or more groups selected from halogen, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfonyl, C₁-C₄ alkylsulfinyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, carboxy C₁-C₄ alkyl, carboxy C₁-C₄ alkoxy, amino, di-C₁-C₄ alkylamino, *N*-C₁-C₄ alkyl-*N*-cyano C₁-C₄ alkylamino, nitro, C₁-C₄ alkylcarbonylamino, cyano, halo C₁-C₄ alkyl, di-halo C₁-C₄ alkyl, tri-halo C₁-C₄ alkyl, halo C₁-C₄ alkoxy, di-halo C₁-C₄ alkoxy, tri-halo C₁-C₄ alkoxy



wherein the R^3 and R^4 groups are such that they optionally join to form a ring system selected from:



, and



;

D, E and G are each independently selected from carbon, oxygen, sulfur, and nitrogen;

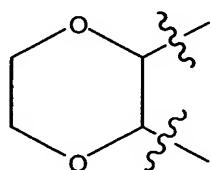
R⁵ is selected from the group consisting of -H, and C₁-C₅ alkyl, provided that at least one of R¹, R², R³, R⁴ and R⁵ is other than hydrogen;

5 and

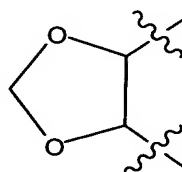
wherein the R¹ and R⁵ groups optionally join to form a piperidyl ring or a oxaxinyl ring;

10 R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³, R⁴⁴, R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰, R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰, R⁷¹, R⁷², R⁷³, R⁷⁴, R⁷⁵, and R⁷⁶ are each optionally present and are each independently selected from the group consisting of -H, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ isoalkyl, amino, nitro, hydroxy, 15 C₁-C₄ alkoxy, C₁-C₄ alkenoxy, oxo, carboxy, halo, halo C₁-C₄ alkyl, dihalo C₁-C₄ alkyl, trihalo C₁-C₄ alkyl, cyano, cyano C₁-C₄ alkyl, dicyano C₁-C₄ alkyl, halophenyl, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkoxy, - (CH₂)-O-(C₆H₄)-O-(CH₃), carboxy C₁-C₄ alkoxy, C₁-C₄ alkylcarboxy C₁-C₄ alkoxy, C₁-C₄ alkoxyamino, C₁-C₄ alkylamino, di C₁-C₄ alkylamino, tri C₁- 20 C₄ alkylamino, amino C₁-C₄ alkoxy, diamino C₁-C₄ alkoxy, C₁-C₄ alkylamino C₁-C₄ alkoxy, di C₁-C₄ alkylamino C₁-C₄ alkoxy, cyano C₁-C₄ alkoxy C₁-C₄ alkyl, -(CH₂)-O-(CF₂)-CHF₂, tetra C₁-C₄ alkoxy C₁-C₄ alkyl, phenyl, benzyl, benzoyl, aryl, *N*-morpholinyl, morpholinyl C₁-C₄ alkoxy, pyrrolidyl C₁-C₄ alkoxy, *N*-pyrrolidyl C₁-C₄ alkoxy, C₁-C₄ alkylcarboxy, 25 carboxy C₁-C₄ alkyl - ethyl ester, pyridyl C₁-C₄ alkyl, pyridyl C₁-C₄ alkoxy, - COO-CH₂-CH₃, with the proviso that when E is -N-, R³⁸ is other than cyano, and that when G is -N-, R³⁶ is -H; and

wherein R³⁸ and R³⁹ are such that they optionally join to form a ring system of the type selected from:



, and



;

with the proviso that when R^1 , R^3 and R^5 are hydrogen:

R^2 is other than alkenyl, alkyl, alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heterocyclealkylcarbonyl,
5 (NZ₁Z₂)alkyl, or -R_AR_B;

where Z₁ and Z₂ are each independently selected from the group consisting of hydrogen, alkoxy carbonyl, alkyl, alkylcarbonyl, benzyl, benzyloxy carbonyl, and formyl;

R^A is selected from the group consisting of aryl and arylalkyl;

10 R^B is selected from the group consisting of aryl, arylalkoxy, arylalkyl, aryloxy, heterocycle, and heterocyclealkyl; and

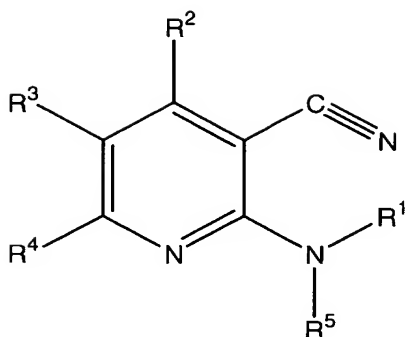
R⁴ is other than alkenyl, alkoxyalkynyl, alkyl, alkynyl, cycloalkyl, aryl, arylalkyl, heterocycle, heterocyclealkyl, or -R_CR_DR_E;

15 where R_C is selected from the group consisting of aryl, arylalkyl, heterocycle and heterocyclealkyl;

R_D is selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and
20 heterocyclesulfonyl; and

R_E is absent or selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl,
25 heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl.

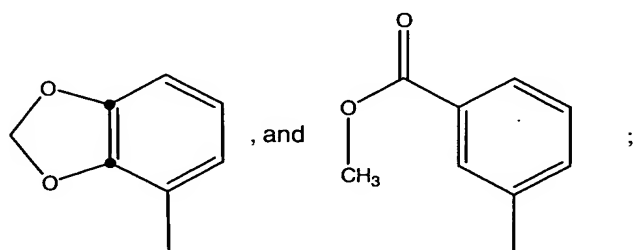
2. The compound according to claim 1, having the structure:



wherein:

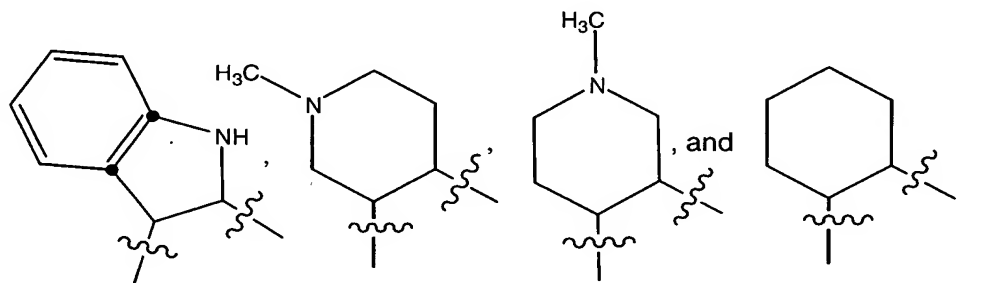
R^1 is selected from the group consisting of -H, methyl, ethyl, propyl, butyl, $-(CH_2)COOH$, phenyl, pyridyl, dimethylaminoethyl, methoxyethyl, tetramethylaminoethyl, carboxymethyl, and phenylacetyl;

R^2 is selected from the group consisting of -H, methyl, ethyl, propyl, butyl, amino, phenyl, methoxy, carboxy, carboxymethyl, hydroxyethylamino, propylamino, ethylamino, methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino, benzylamino, dimethylaminoethylamino, phthaloaminoethyl, fluorophenyl, difluorophenyl, chlorophenyl, bromophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl, 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, $-S(CH_3)$, tetramethylaminoethyl, acetaminophenyl, methoxyphenylamino, carboxyphenyl, carboxy-3-isopyrryl, cyanophenyl, cyclopropyl, phenoxyphenyl, pyridyl, dihydroxybromophenyl, difluoromethoxyphenyl, trifluoromethylphenyl, trifluoromethylfluorophenyl, hydroxyphenyl, methylaminomethyl, methylaminoethyl, thiophyl, pyrryl, aminomethyl,



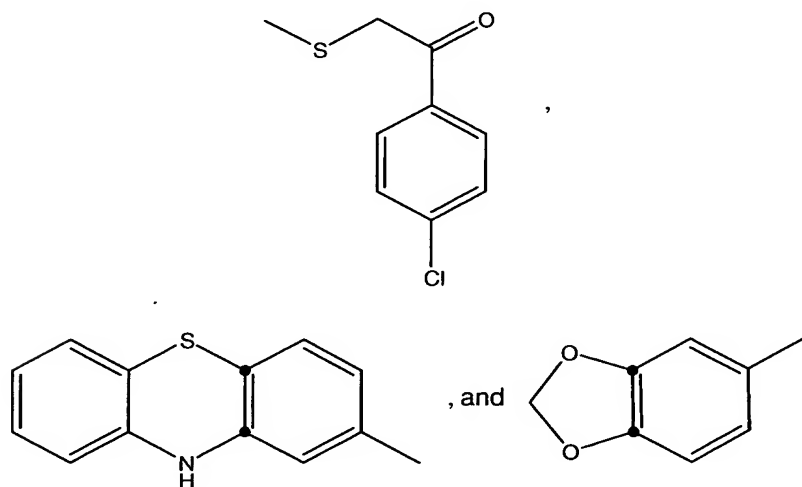
R^3 is selected from the group consisting of -H, methyl, ethyl, propyl, isopropyl, cyano, aminomethyl, phenyl, fluorophenyl, and amino, except that when R^2 is pyrrol, R^3 is other than cyano;

5 wherein the R^2 and R^3 groups are such that they optionally join to form a ring system selected from:

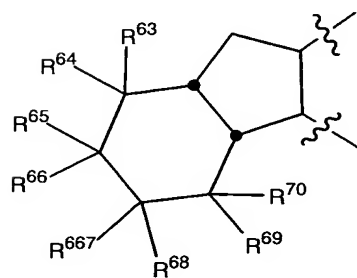
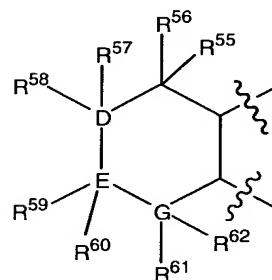
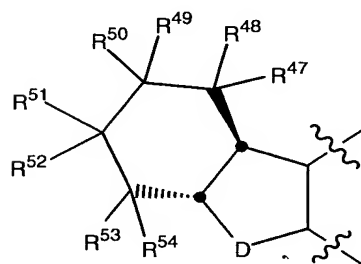
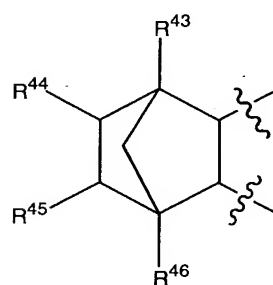
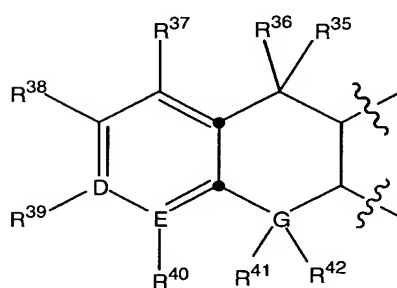
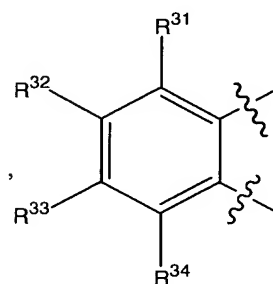
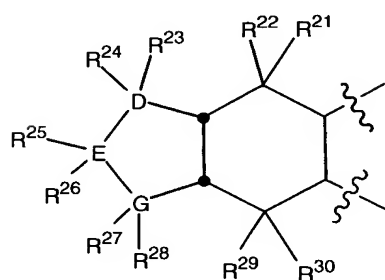
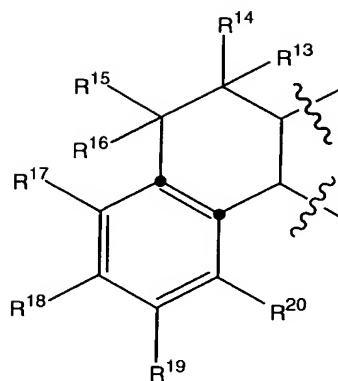
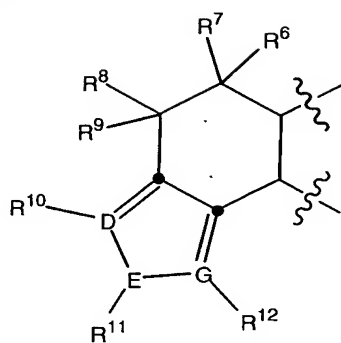


R^4 is selected from the group consisting of -H, methyl, ethyl, propyl, hydroxy, furyl, methylfuryl, methylimidazolyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, bromophenyl, fluorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, methoxy, carbamylphenyl, mercapto, *N*-isoimidazolylphenyl, isopropyl, amino, hydroxynaphthyl, thiazoyl, carboxymethylphenyl, trifluoromethylphenyl, methylphenyl, cyanophenyl, dimethylphenyl, fluorobenzhydryl, methoxyfuryl, aminosulfonylphenyl,

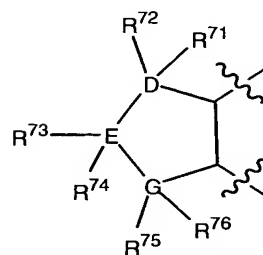
10
15



wherein the R^3 and R^4 groups are such that they optionally join to form a ring system selected from:



, and



;

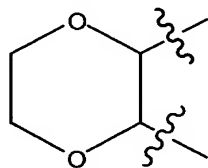
D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

5 R^5 is selected from the group consisting of -H, and C_1 - C_5 alkyl, provided that at least one of R^1 , R^2 , R^3 , R^4 and R^5 is other than hydrogen; and

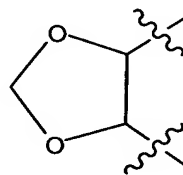
wherein the R^1 and R^5 groups optionally join to form a piperidyl ring;

10 R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} , R^{22} , R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , R^{30} , R^{31} , R^{32} , R^{33} , R^{34} , R^{35} , R^{36} , R^{37} , R^{38} , R^{39} , R^{40} , R^{41} , R^{42} , R^{43} , R^{44} , R^{45} , R^{46} , R^{47} , R^{48} , R^{49} , R^{50} , R^{51} , R^{52} , R^{53} , R^{54} , R^{55} , R^{56} , R^{57} , R^{58} , R^{59} , R^{60} , R^{61} , R^{62} , R^{63} , R^{64} , R^{65} , R^{66} , R^{67} , R^{68} , R^{69} , R^{70} , R^{71} , R^{72} , R^{73} , R^{74} , R^{75} , and R^{76} are each optionally present and are each independently selected from the group consisting of - H, methyl, ethyl, propyl, butyl, isobutyl, amino, nitro, hydroxy, methoxy, ethoxy, 15 propoxy, 2-propenoxy, oxo, carboxy, bromo, chloro, fluoro, trifluoromethyl, chloromethyl, hydroxymethyl, dicyanomethyl, 2-fluorophenyl, 3-fluorophenyl, hydroxyethoxy, ethoxyethoxy, $-(CH_2)-O-(C_6H_4)-O-(CH_3)$, carboxymethoxy, isopropylcarboxymethoxy, isobutylcarboxymethoxy, methylamino, dimethylamino, aminoethoxy, diaminoethoxy, 20 dimethylaminoethoxy, cyanomethoxymethyl, 2-propenoxymethyl, methoxymethyl, isopropoxymethyl, ethoxymethyl, $-(CH_2)-O-(CF_2)-CHF_2$, isobutoxymethyl, benzoyl, phenyl, *N*-morpholinyl, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, oxo, ethylcarboxy, carboxymethyl - ethyl ester, pyridylmethyl, 4-pyridylmethoxy, 2-pyridylmethyl, and $-COO-$ 25 CH_2-CH_3 , with the proviso that when G is -N-, R^{36} is -H; and

wherein R^{38} and R^{39} are such that they optionally join to form a ring system of the type selected from:



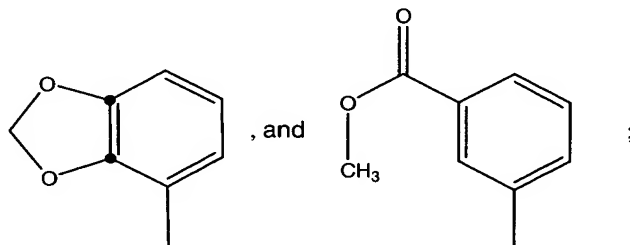
, and



3. The compound according to claim 2, wherein:

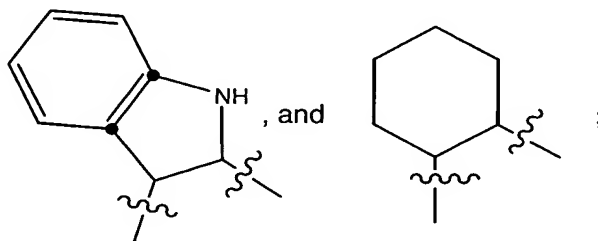
R^1 is selected from the group consisting of -H, methyl, ethyl, -
(CH₂)COOH, and phenyl;

5 R^2 is selected from the group consisting of -H, methyl, ethyl, amino, phenyl, methoxy, carboxy, hydroxyethylamino, propylamino, ethylamino, methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino, benzylamino, dimethylaminoethylamino, fluorophenyl, difluorophenyl, chlorophenyl, bromophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl,
10 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, -S(CH₃), acetylaminophenyl, methoxyphenylamino, carboxyphenyl, cyanophenyl, cyclopropyl, phenoxyphenyl, pyridyl, dihydroxybromophenyl, difluoromethoxyphenyl, trifluoromethylphenyl, trifluoromethylfluorophenyl, hydroxyphenyl,



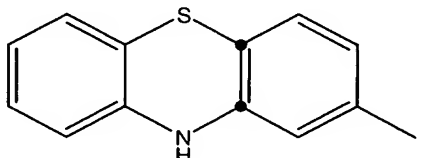
15 R^3 is selected from the group consisting of -H, methyl, ethyl, propyl, isopropyl, cyano, and aminomethyl;

wherein the R^2 and R^3 groups are such that they optionally join to form a ring system selected from:

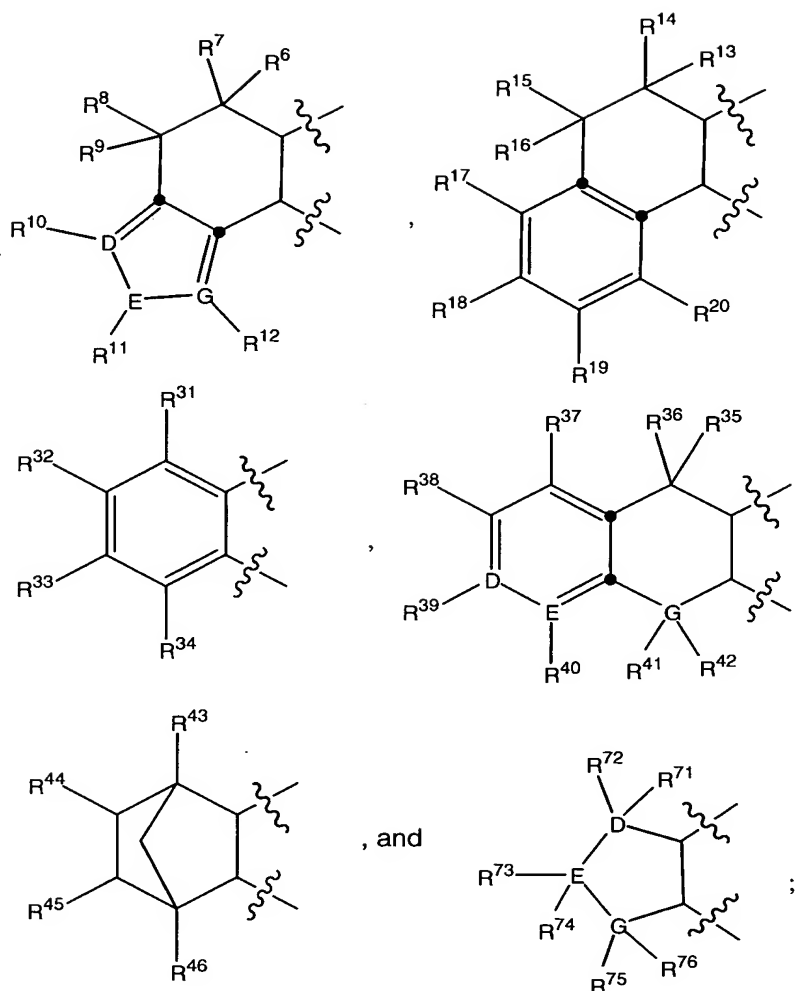


20 R^4 is selected from the group consisting of -H, methyl, ethyl, propyl, hydroxy, furyl, indolyl, methylfuryl, methylimidazolyl, phenyl,

- hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, methoxy, carbamylphenyl, *N*-isoimidazolylphenyl, amino, hydroxynaphthyl, thiazoyl, carboxymethylphenyl, aminosulfonylphenyl, and
- 5



wherein the R^3 and R^4 groups are such that they can join to form a ring system selected from:



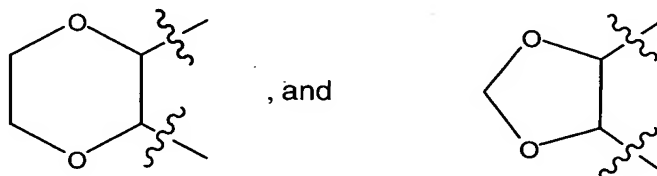
D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

5 R⁵ is selected from the group consisting of -H, and C₁-C₅ alkyl, provided that at least one of R¹, R², R³, R⁴ and R⁵ is other than hydrogen;

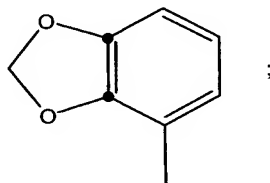
R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³, R⁴⁴, R⁴⁵, R⁴⁶, R⁷¹, R⁷², R⁷³, R⁷⁴, R⁷⁵, and R⁷⁶ are each optionally present and are each

10 independently selected from the group consisting of - H, methyl, ethyl, butyl, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, chloro, fluoro, trifluoromethyl, chloromethyl, hydroxymethyl,

- 5 dicyanomethyl, hydroxyethoxy, ethoxyethoxy, $-(\text{CH}_2)-\text{O}-(\text{C}_6\text{H}_4)-\text{O}-(\text{CH}_3)$,
carboxymethoxy, isopropylcarboxymethoxy, methylamino, dimethylamino,
aminoethoxy, diaminoethoxy, cyanomethoxymethyl, methoxymethyl,
isopropoxymethyl, ethoxymethyl, $-(\text{CH}_2)-\text{O}-(\text{CF}_2)-\text{CHF}_2$, isobutoxymethyl,
phenyl, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, and
pyridylmethyl, with the proviso that when G is -N-, R^{36} is -H; and
wherein R^{38} and R^{39} are such that they optionally join to form a ring
system of the type selected from:

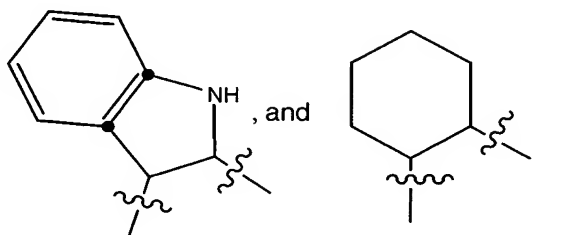


- 10 4. The compound according to claim 2, wherein:
 R^1 is selected from the group consisting of -H, methyl, and ethyl;
 R^2 is selected from the group consisting of -H, methyl, amino,
phenyl, methoxy, hydroxyethylamino, propylamino, ethylamino,
methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino,
15 benzylamino, dimethylaminoethylamino, fluorophenyl, difluorophenyl,
chlorophenyl, bromophenyl, furyl, carbamylpyrrol, methyl-1,3-isodiazoyl,
1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, $-\text{S}(\text{CH}_3)$, acetaminophenyl,
methoxyphenylamino, carboxyphenyl, cyanophenyl, cyclopropyl,
phenoxyphenyl, pyridyl, dihydroxybromophenyl, difluoromethoxyphenyl,
20 and



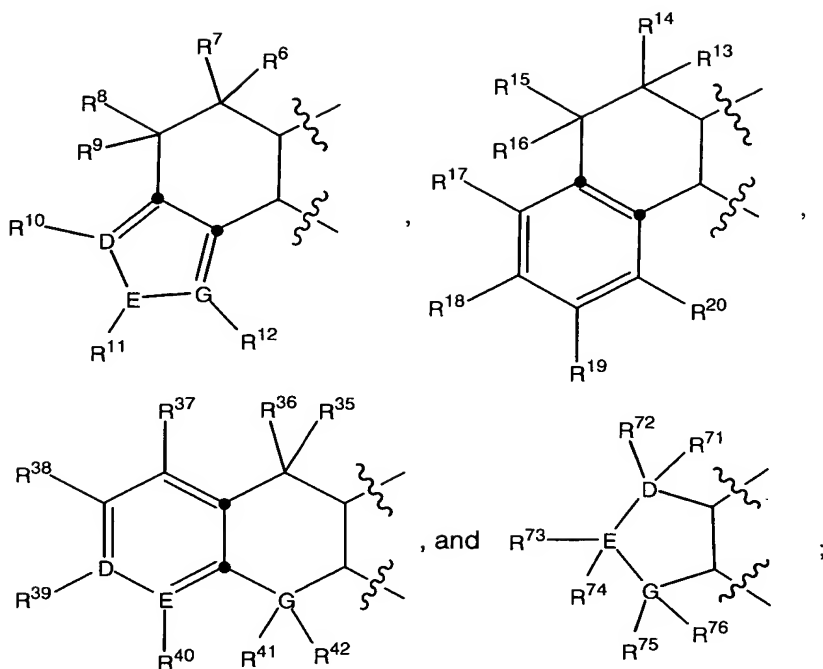
R^3 is selected from the group consisting of -H, methyl, ethyl, propyl,
isopropyl, and cyano;

wherein the R^2 and R^3 groups are such that they optionally join to form a ring system selected from:



- 5 R^4 is selected from the group consisting of -H, methyl, ethyl, propyl, hydroxy, furyl, indolyl, methylfuryl, methylimidazolyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, methoxy, carbamylphenyl, amino, and
- 10 aminosulfonylphenyl;

wherein the R^3 and R^4 groups are such that they optionally join to form a ring system selected from:

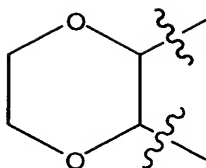


D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

R^5 is -H, provided that at least one of R^1 , R^2 , R^3 , R^4 and R^5 is other than hydrogen;

R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{35} , R^{36} , R^{37} , R^{38} , R^{39} , R^{40} , R^{41} , R^{42} , R^{71} , R^{72} , R^{73} , R^{74} , R^{75} , and R^{76} are each optionally present and are each independently selected from the group consisting of - H, methyl, ethyl, butyl, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, fluoro, trifluoromethyl, chloromethyl, dicyanomethyl, hydroxyethoxy, ethoxyethoxy, $-(CH_2)-O-(C_6H_4)-O-(CH_3)$, carboxymethoxy, isopropylcarboxymethoxy, methylamino, dimethylamino, aminoethoxy, diaminoethoxy, phenyl, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, and pyridylmethyl, with the proviso that when G is -N-, R^{36} is -H; and

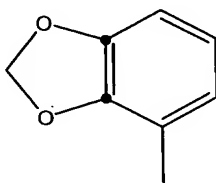
wherein R^{38} and R^{39} are such that they can join to form a ring system consisting of:



5. The compound according to claim 2, wherein:

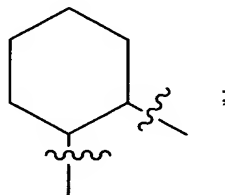
R^1 is selected from the group consisting of -H, methyl, and ethyl;

5 R^2 is selected from the group consisting of -H, methyl, amino, phenyl, methoxy, hydroxyethylamino, propylamino, ethylamino, methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino, benzylamino, dimethylaminoethylamino, fluorophenyl, difluorophenyl, chlorophenyl, bromophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl,
10 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, -S(CH₃), acetaminophenyl, methoxyphenylamino, carboxyphenyl, and



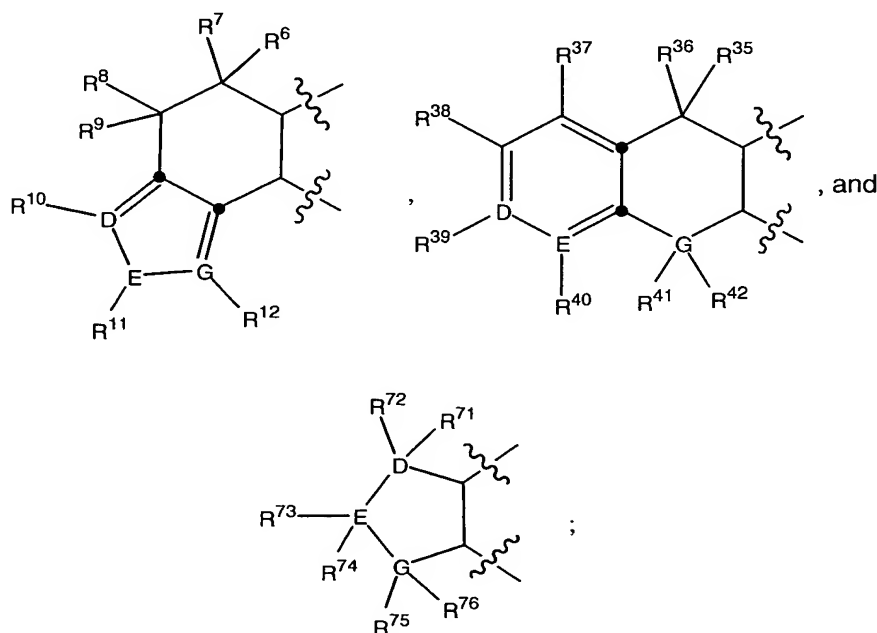
R^3 is selected from the group consisting of -H, methyl, ethyl, propyl, and isopropyl;

15 wherein the R^2 and R^3 groups are optionally such that they join to form:



5 R^4 is selected from the group consisting of -H, methyl, ethyl, propyl, furyl, indolyl, methylfuryl, methylimidazolyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, and aminosulfonylphenyl;

wherein the R^3 and R^4 groups are such that they optionally join to form a ring system selected from:



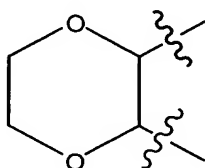
10 D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

R^5 is -H, provided that at least one of R^1 , R^2 , R^3 , R^4 and R^5 is other than hydrogen;

15 R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{35} , R^{36} , R^{37} , R^{38} , R^{39} , R^{40} , R^{41} , R^{42} , R^{71} , R^{72} , R^{73} , R^{74} , R^{75} , and R^{76} are each optionally present and are each independently selected from the group consisting of - H, methyl, ethyl, butyl, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, fluoro, trifluoromethyl, chloromethyl, dicyanomethyl, hydroxyethoxy, ethoxyethoxy, carboxymethoxy, isopropylcarboxymethoxy,

methylamino, dimethylamino, aminoethoxy, diaminoethoxy, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, and pyridylmethyl, with the proviso that when G is -N-, R³⁶ is -H; and

5 wherein R³⁸ and R³⁹ are such that they optionally join to form a ring system consisting of: .



6. The compound according to claim 2, wherein:

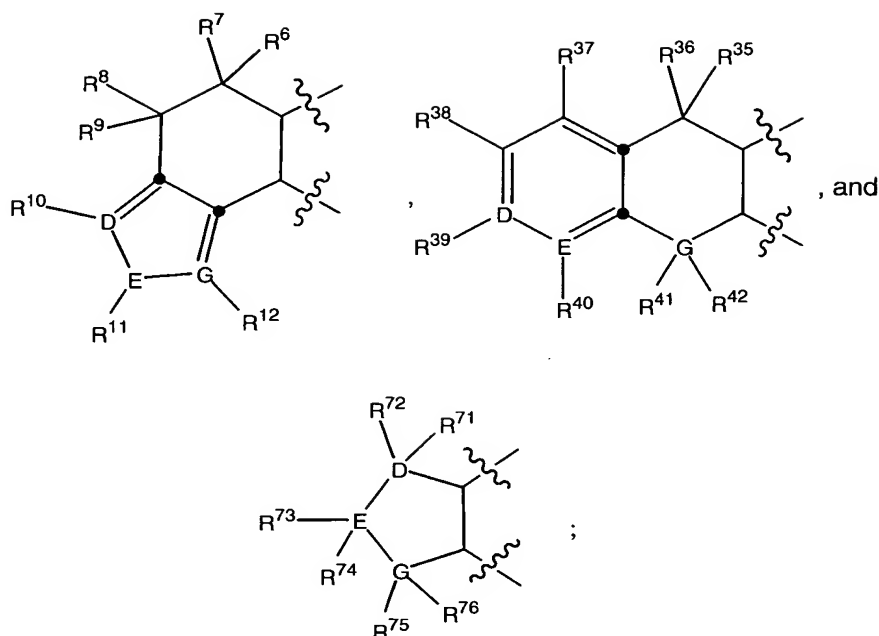
R¹ is -H;

10 R² is selected from the group consisting of amino, phenyl, fluorophenyl, difluorophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl, 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, acetylamino, methoxyphenylamino, and carboxyphenyl;

R³ is selected from the group consisting of -H, methyl, ethyl, and propyl;

15 R⁴ is selected from the group consisting of methyl, ethyl, propyl, furyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dihydroxyborophenyl, and aminosulfonylphenyl;

20 wherein the R³ and R⁴ groups are such that they optionally join to form a ring system selected from:

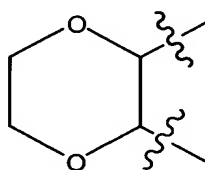


D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

R⁵ is -H, provided that at least one of R¹, R², R³, R⁴ and R⁵ is other than hydrogen;

R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R³⁵, R³⁶, R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁷¹, R⁷², R⁷³, R⁷⁴, R⁷⁵, and R⁷⁶ are each optionally present and are each independently selected from the group consisting of - H, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, fluoro, trifluoromethyl, chloromethyl, dicyanomethyl, hydroxyethoxy, ethoxyethoxy, carboxymethoxy, isopropylcarboxymethoxy, methylamino, dimethylamino, aminoethoxy, diaminoethoxy, morpholinylethoxy, pyrrolidylethoxy, and pyridylmethyl, with the proviso that when G is -N-, R³⁶ is -H; and

wherein R³⁸ and R³⁹ optionally are such that they optionally join to form:



7. The compound according to claim 2, wherein the aminocyanopyridine MK-2 inhibiting compound comprises at least one compound that is selected from the group consisting of:

- 5 2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
10 8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,
2-amino-3-cyano-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxamide,
2-amino-4-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
15 2-amino-6-(2-furyl)-4-(1-methyl-1H-imidazol-4-yl)nicotinonitrile,
8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,
2-amino-4-(2-furyl)-8-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(2,6-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
20 2-amino-6-(4-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile, 2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoic acid,
25 2-amino-6-(2-furyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,
2-amino-3-cyano-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,
2-amino-6-(3-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
30 2-amino-6-(2-furyl)-4-(1H-imidazol-4-yl)nicotinonitrile,
2-amino-4-(2,4-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

- 4,6-diamino-2-(trifluoromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(2-furyl)-6,8-dihydro-5H-pyrrolo[3,4-h]quinoline-3-carbonitrile,
4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoic acid,
5 2-amino-4-(2-furyl)-5,6-dihydro-1,8-phenanthroline-3-carbonitrile,
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
2-amino-4-(1-methyl-1H-imidazol-4-yl)-6-phenylnicotinonitrile,
2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,
4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoic acid,
10 2-amino-4-(3-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
N-{4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenyl}methanesulfonamide,
2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrrolo[2,3-h]quinoline-3-carbonitrile,
15 2-amino-4-(1H-imidazol-5-yl)-6-phenylnicotinonitrile,
2-amino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(1H-imidazol-5-yl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(2-furyl)-6-(1H-pyrazol-4-yl)nicotinonitrile,
20 2-amino-4-(4-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(2,5-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(4-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
25 2-amino-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
4,6-diamino-2-(chloromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(1H-imidazol-4-yl)-6-phenylnicotinonitrile,
30 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzenesulfonamide,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenylboronic acid,
2-amino-6-(4-methoxyphenyl)-4-(4H-1,2,4-triazol-3-yl)nicotinonitrile,

- 2-amino-4-(2-fluorophenyl)-6-(3-furyl)nicotinonitrile,
2-amino-6-(2-furyl)-4-(methylthio)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,
8-amino-6-(2-furyl)-4,5-dihydro-2H-pyrazolo[4,3-h]quinoline-7-carbonitrile,
5 2-amino-4-(2-bromophenyl)-6-(2-furyl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,
2-amino-4-phenyl-6-thien-2-ylnicotinonitrile,
2-amino-4-(3-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
10 2-amino-4-(2-furyl)-7-methyl-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
2-amino-4-(2-fluorophenyl)-6-(1H-pyrrol-2-yl)nicotinonitrile,
2-amino-4-(2-furyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
15 2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-3-yl)nicotinonitrile,
3-amino-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,
N-[4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-
yl)phenyl]acetamide,
6-amino-4-[(4-methoxyphenyl)amino]-2-(trifluoromethyl)-2,3-
20 dihydrofuro[2,3-b]pyridine-5-carbonitrile,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]-*N*-(tert-
butyl)benzenesulfonamide,
4,6-diamino-2-ethyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
6-amino-4-(2-furyl)-2,4'-bipyridine-5-carbonitrile,
25 2,4-diamino-6-(methylthio)nicotinonitrile,
3-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic
acid,
2-amino-6-(4-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(1,3-benzodioxol-4-yl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-
30 3-carbonitrile,
4,6-diamino-2-methyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(1H-imidazol-5-yl)-6-[4-(methylsulfonyl)phenyl]nicotinonitrile,

- 2,4-diaminoquinoline-3-carbonitrile,
2,8-diamino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4,6-di(2-furyl)nicotinonitrile,
4,6-diamino-2-butyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
5 ethyl 4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoate,
2,4-diamino-6-methoxynicotinonitrile,
2-amino-4-methylnicotinonitrile,
2-amino-4-(4-cyanophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
10 2-amino-4-cyclopropyl-6-methylnicotinonitrile,
2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-2-yl)nicotinonitrile,
2-amino-4-(2-chlorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
2-amino-6-(2-furyl)-4-(4-phenoxyphenyl)nicotinonitrile,
15 2-amino-4-pyridin-3-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
2-amino-6-[[2-(4-chlorophenyl)-2-oxoethyl]thio]-4-(2-furyl)pyridine-3,5-
dicarbonitrile,
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,
20 2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-4-yl)nicotinonitrile,
4-(6-amino-5-cyano-4-phenylpyridin-2-yl)-N-(tert-
butyl)benzenesulfonamide,
2-amino-4-methoxynicotinonitrile,
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]benzoic acid,
25 4,6-diamino-2-[(4-methoxyphenoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-
5-carbonitrile,
2-amino-4-(2-fluorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,
4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]-N-(tert-
butyl)benzenesulfonamide,
30 (2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,
3-Pyridinecarbonitrile, 2-Amino-4-Methylm
2-amino-6-(2-furyl)nicotinonitrile,

- 2-amino-4-(2-furyl)-6-(3-hydroxyphenyl)nicotinonitrile,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzamide,
2-amino-4-(2-furyl)-7-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(2-furyl)-6-(1H-indol-3-yl)nicotinonitrile,
5 2-amino-4-pyridin-4-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
2-amino-4-(3-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,
2-amino-4-[2-(difluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-
h]quinoline-3-carbonitrile,
10 2-amino-4-(2-furyl)-6-thien-3-ylnicotinonitrile,
2-amino-4-(3-fluorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,
2-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,
2,4-diamino-6-propylpyridine-3,5-dicarbonitrile,
4,6-diamino-2-[(prop-2-ynyloxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-5-
15 carbonitrile,
4,6-diamino-2-(hydroxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-
carbonitrile,
2-amino-6-(2-furyl)-4-[4-(trifluoromethyl)phenyl]nicotinonitrile,
5-amino-7-methylthieno[3,2-b]pyridine-6-carbonitrile,
20 2-amino-4-(2-furyl)-5,5-dimethyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-
3-carbonitrile,
N-[3-cyano-4-(2-fluorophenyl)-6-(2-furyl)pyridin-2-yl]glycine,
2-[(allyloxy)methyl]-4,6-diamino-2,3-dihydrofuro[2,3-b]pyridine-5-
carbonitrile,
25 2-amino-4-(2-furyl)-6-methyl-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
4,6-diamino-2-(methoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-
carbonitrile,
2-amino-4-(2-furyl)-6-(1H-indol-3-yl)nicotinonitrile,
2-amino-4-(2-furyl)-6-[4-(1H-imidazol-1-yl)phenyl]nicotinonitrile,
30 2-amino-4-(2-furyl)-6-(4-hydroxyphenyl)nicotinonitrile,
2-amino-4-(2-furyl)-5,6,7,8-tetrahydro-5,8-methanoquinoline-3-carbonitrile,

4,6-diamino-2-(isopropoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
3-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenylboronic acid,
4,6-diamino-2-(ethoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
5 2-amino-4-(4-bromophenyl)-6-(2-furyl)nicotinonitrile,
4,6-diamino-2-[(1,1,2,2-tetrafluoroethoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-[2-fluoro-4-(trifluoromethyl)phenyl]-6-(2-furyl)nicotinonitrile,
2-amino-4-(2-methoxyphenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
10 2-amino-4-(2-fluorophenyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
3,6-diamino-4-ethyl-1H-pyrazolo[3,4-b]pyridine-5-carbonitrile,
6-amino-4-(2-furyl)-2,2'-bipyridine-5-carbonitrile,
15 2-amino-4-(2-furyl)-6-(8-hydroxy-1-naphthyl)nicotinonitrile,
4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic acid,
2-amino-6-(3,4-dichlorophenyl)-4-(2-furyl)nicotinonitrile,
2-amino-4-(2-furyl)-6-(10H-phenothiazin-2-yl)nicotinonitrile,
20 sodium 2-amino-3-cyano-4-quinolinecarboxylate,
2-anilino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
2-amino-4-(3-fluorophenyl)-6-(2-furyl)nicotinonitrile,
2-amino-4-(4-fluorophenyl)-6-(2-furyl)nicotinonitrile,
4,6-diamino-2-(tert-butoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
25 2-amino-4-(2-furyl)-6-(1,3-thiazol-2-yl)nicotinonitrile,
4-(2-fluorophenyl)-6-(2-furyl)-2-piperidin-1-ylnicotinonitrile,
2-amino-6-(4-chlorophenyl)-4-(2-furyl)nicotinonitrile,
2-amino-6-(4-hydroxyphenyl)-4-(2-methoxyphenyl)nicotinonitrile,
30 2-amino-6-(2-furyl)-4-(2-hydroxyphenyl)nicotinonitrile,
methyl 3-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoate,

- 2-amino-4-(2-chlorophenyl)-6-(5-methyl-2-furyl)nicotinonitrile,
3,6-diamino-2-benzoylthieno[2,3-b]pyridine-5-carbonitrile,
methyl 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoate,
2-aminonicotinonitrile,
- 5 2-amino-4-(2-furyl)-8-[[2-(trimethylsilyl)ethoxy]methyl]-6,8-dihydro-5H-
pyrazolo[3,4-h]quinoline-3-carbonitrile,
3-amino-5H-pyrido[4,3-b]indole-4-carbonitrile,
2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic
acid,
- 10 2-amino-6-(4-methoxyphenyl)-4-phenylnicotinonitrile,
2-amino-4-(2-furyl)-5,6,7,8-tetrahydroquinoline-3-carbonitrile,
2-amino-4-(2-furyl)-6-isobutylnicotinonitrile,
2-amino-6-benzyl-4-(2-furyl)nicotinonitrile,
2-amino-4-(2-furyl)-6-methyl-5-phenylnicotinonitrile,
- 15 2-amino-4-(2-furyl)-6-[4-(trifluoromethoxy)phenyl]nicotinonitrile,
2-amino-4-(2-furyl)-6-propyl-5,6,7,8-tetrahydro-1,6-naphthyridine-3-
carbonitrile,
2-amino-4-(2-furyl)benzo[h]quinoline-3-carbonitrile,
2-amino-6-(4-methoxyphenyl)-4-thien-2-yl nicotinonitrile,
- 20 2-amino-4-(2-fluorophenyl)-6-tetrahydrofuran-2-yl nicotinonitrile,
ethyl 6-amino-5-cyano-4-(2-furyl)pyridine-2-carboxylate,
2-amino-4-(2-furyl)-9-methoxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(2-furyl)-8-methoxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(2-furyl)-8,9-dimethoxy-5,6-dihydrobenzo[h]quinoline-3-
carbonitrile,
- 25 2-amino-4-(2-furyl)-7-methoxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(2-furyl)-7,9-dimethyl-5,6-dihydrobenzo[h]quinoline-3-
carbonitrile,
ethyl 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoate,
- 30 2-amino-6-(3-bromophenyl)-4-(2-furyl)nicotinonitrile,
2-amino-4-(2-furyl)-6-[4-(trifluoromethyl)phenyl]nicotinonitrile,
2-amino-4-(2-furyl)-6-[3-(trifluoromethyl)phenyl]nicotinonitrile,

- 2-amino-4-(2-furyl)-6-[4-(methylsulfonyl)phenyl]nicotinonitrile,
4,6-diamino-2-(phenoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-
carbonitrile,
4,6-diamino-3-phenyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
5 4,6-diamino-3-vinyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(2-fluorophenyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-
h]quinoline-3-carbonitrile,
3-amino-1-methyl-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,
2-amino-4-(2-fluorophenyl)-5,5-dimethyl-6,8-dihydro-5H-pyrazolo[3,4-
10 h]quinoline-3-carbonitrile,
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,
2-amino-4-[2-(difluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-
h]quinoline-3-carbonitrile,
2-(benzylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
15 2-amino-4-(2-furyl)-6,7-dihydro-5H-benzo[6,7]cyclohepta[1,2-b]pyridine-3-
carbonitrile,
2-amino-4-(2-furyl)-5H-indeno[1,2-b]pyridine-3-carbonitrile,
3-amino-1-methyl-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,
20 2-amino-4-(2-thienyl)-5,6,7,8-tetrahydro-3-quinolinecarbonitrile,
2-amino-4-(3-fluorophenyl)-5,6,7,8-tetrahydro-3-quinolinecarbonitrile,
2-(1-piperidinyl)-6-(2-thienyl)-4-(trifluoromethyl)nicotinonitrile,
2-(dimethylamino)-6-(2-thienyl)-4-(trifluoromethyl)nicotinonitrile,
3-Quinolinecarbonitrile,
25 2-amino-4-methyl- or 2-amino-4-methyl-3-quinolinecarbonitrile,
2-amino-4-(4-methoxyphenyl)-6-(2-thienyl)nicotinonitrile,
2-amino-6-cyclopropyl-4-(2-methoxyphenyl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-phenylnicotinonitrile,
(4bS,8aR)-2,4-diamino-4b,5,6,7,8,8a-hexahydro[1]benzofuro[2,3-
30 b]pyridine-3-carbonitrile,
2-amino-4-(2-fluorophenyl)-5,5-dimethyl-6,8-dihydro-5H-pyrazolo[3,4-
h]quinoline-3-carbonitrile,

- 2-amino-4-(2-furyl)-5-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
3-amino-1,6-dimethyl-5,6,7,8-tetrahydro-2,6-naphthyridine-4-carbonitrile,
3-amino-1,7-dimethyl-5,6,7,8-tetrahydro-2,7-naphthyridine-4-carbonitrile,
5 2-amino-4-(2-fluorophenyl)-5-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(2-fluorophenyl)-5-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
4,6-diamino-2-(morpholin-4-ylmethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
10 ethyl (4,6-diamino-5-cyano-2-oxo-2,3-dihydro-1H-pyrrolo[2,3-b]pyridin-1-yl)acetate,
2-amino-4-(2-methoxyphenyl)-6-(5-methyl-2-furyl)nicotinonitrile,
2-amino-6-methyl-4-(4-nitrophenyl)nicotinonitrile,
15 2-amino-4-(3,4-dimethoxyphenyl)-6-(5-methyl-2-furyl)nicotinonitrile,
2,4-diamino-6-[(4-methoxyphenyl)thio]nicotinonitrile,
4,6-diamino-2-(phenoxyethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
4,6-diamino-3-phenyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
20 4,6-diamino-2-[(2-methylphenoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(2-furyl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-4-(3-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(4-methoxyphenyl)-6,7-dihydro-5H-cyclopenta[b]pyridine-3-carbonitrile,
25 2-amino-9-ethyl-9H-pyrido[2,3-b]indole-3-carbonitrile,
2-amino-6-isobutyl-4-(4-methylphenyl)nicotinonitrile,
1-(2-furyl)-3-[(3-hydroxypropyl)amino]-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,
30 2-azepan-1-yl-6-(4-fluorophenyl)-4-phenylnicotinonitrile,
2-amino-6-tert-butyl-4-(4-methylphenyl)nicotinonitrile,
2-amino-4-(4-bromophenyl)-6-methylnicotinonitrile,

- 2-amino-4-thien-2-yl-5,6,7,8,9,10-hexahydrocycloocta[b]pyridine-3-carbonitrile,
2-amino-4-(4-chlorophenyl)-6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridine-3-carbonitrile,
5 2-(allylamino)-5-amino-7-(4-bromophenyl)thieno[3,2-b]pyridine-3,6-dicarbonitrile,
2-amino-4-pyridin-3-yl-5,6,7,8,9,10-hexahydrocycloocta[b]pyridine-3-carbonitrile,
2-amino-4-(4-bromophenyl)-6-tert-butyl nicotinonitrile,
10 1-(2-furyl)-3-morpholin-4-yl-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,
2-amino-4-(4-methylphenyl)-6,7-dihydro-5H-cyclopenta[b]pyridine-3-carbonitrile,
2-amino-7,7-dimethyl-7,8-dihydro-5H-pyrano[4,3-b]pyridine-3-carbonitrile,
2-amino-6-isobutyl-4-(4-methoxyphenyl)nicotinonitrile,
15 4,6-diamino-2-oxo-1-phenyl-2,3-dihydro-1H-pyrrolo[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(2-methoxyphenyl)-5,6-dimethylnicotinonitrile,
2-(dimethylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
2-(dimethylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
20 4-(2-fluorophenyl)-6-(2-furyl)-2-(methylamino)nicotinonitrile,
4-(2-fluorophenyl)-6-(2-furyl)-2-morpholin-4-yl nicotinonitrile,
tert-butyl N-[3-cyano-4-(2-fluorophenyl)-6-(2-furyl)pyridin-2-yl]glycinate,
2-(ethylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
ethyl 4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoate,
25 2-amino-6-(2-fluorophenyl)-4-(3-furyl)nicotinonitrile,
6-amino-4-(2-fluorophenyl)-2,2'-bipyridine-5-carbonitrile,
2-amino-4-(2-fluorophenyl)-6-thien-2-yl nicotinonitrile,
ethyl 6-amino-5-cyano-4-(2-fluorophenyl)pyridine-2-carboxylate,
2-amino-6-(2-furyl)-4-phenylnicotinonitrile,
30 ethyl 2-amino-3-cyano-4-(2-furyl)-5,6,7,8-tetrahydroquinoline-6-carboxylate,
2-amino-4-(2-furyl)-6-(4-hydroxyphenyl)-5-methylnicotinonitrile,

- 2-amino-4-(2-furyl)-6-(4-methoxyphenyl)-5-methylnicotinonitrile,
2-amino-6-(4-fluorophenyl)-4-(2-furyl)-5-methylnicotinonitrile,
2-amino-4-(2-furyl)-5,6-diphenylnicotinonitrile,
2-amino-4-(2-furyl)-5-methyl-6-phenylnicotinonitrile,
5 2-amino-6-(3,4-dimethylphenyl)-4-(2-furyl)nicotinonitrile,
2-amino-6-(4-fluorophenyl)-4-(2-furyl)nicotinonitrile,
2-amino-4-(3-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,
6-amino-4-(3-fluorophenyl)-2,4'-bipyridine-5-carbonitrile,
6-amino-4-(2-fluorophenyl)-2,4'-bipyridine-5-carbonitrile,
10 2-amino-4-butyl-6-methylnicotinonitrile,
2-amino-6-methyl-4-propylnicotinonitrile,
2-amino-4-ethyl-6-methylnicotinonitrile, 2-amino-4,6-dimethylnicotinonitrile,
2-amino-4-[2-(hexyloxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
15 2-amino-4-[2-(beta-D-glucopyranosyloxy)phenyl]-6,7-dihydro-5H-
pyrazolo[3,4-h]quinoline-3-carbonitrile,
4-[2-(allyloxy)phenyl]-2-amino-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
methyl [2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-
20 yl)phenoxy]acetate,
2-amino-4-(2-ethoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
ethyl 4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxylate,
2-amino-6-methylnicotinonitrile,
25 2-amino-6-(4-cyanophenyl)-4-(2-furyl)nicotinonitrile,
2-amino-6-(4-fluorobenzyl)-4-(2-furyl)nicotinonitrile,
2-amino-5-(4-fluorophenyl)-4-(2-furyl)-6-methylnicotinonitrile,
2-amino-4-(2-furyl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-4-(2-methylphenyl)-5,6,7,8-tetrahydroquinoline-3-carbonitrile,
30 2-amino-4-(4-methoxyphenyl)-5,6,7,8-tetrahydroquinoline-3-carbonitrile,
2-amino-4-phenyl-5,6,7,8-tetrahydroquinoline-3-carbonitrile,
2-amino-6-(4-methoxyphenyl)-4-(2-methylphenyl)nicotinonitrile,

- 2-amino-4,6-bis(4-methoxyphenyl)nicotinonitrile,
2-amino-4-(3-chlorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-4-(2-chlorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-4-(2-furyl)-5,6,7,8-tetrahydro-1,6-naphthyridine-3-carbonitrile,
5 2-amino-4-(2-furyl)-6-(4-methylphenyl)nicotinonitrile,
2-amino-4-(2-furyl)-6-phenylnicotinonitrile,
6-amino-4-(2-furyl)-2,3'-bipyridine-5-carbonitrile,
2-amino-6-(1,3-benzodioxol-5-yl)-4-(2-furyl)nicotinonitrile,
2-amino-4-isoquinolin-4-yl-6-(4-methoxyphenyl)nicotinonitrile,
10 2-amino-4-(1-benzothien-3-yl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-6-(4-methoxyphenyl)-4-thien-3-ylnicotinonitrile,
2-amino-4-(3-furyl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-6-(4-methoxyphenyl)-4-(1H-pyrrol-2-yl)nicotinonitrile,
2-amino-4-(2-furyl)-6-(1H-pyrrol-2-yl)nicotinonitrile,
15 2'-amino-6'-(4-methoxyphenyl)-3,4'-bipyridine-3'-carbonitrile,
2-amino-4-[2-(trifluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-
h]quinoline-3-carbonitrile,
2-amino-4-(2-furyl)-5H-thiochromeno[4,3-b]pyridine-3-carbonitrile,
2-amino-4-{4-[(2-cyanoethyl)(methyl)amino]phenyl}-6,7-dihydro-5H-
20 pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-[2-(2-hydroxyethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-
h]quinoline-3-carbonitrile,
2-amino-4-(2-methylphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
25 2-amino-4-[4-(dimethylamino)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-
h]quinoline-3-carbonitrile,
2-amino-4-(1H-indol-7-yl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
methyl 4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-
30 yl)benzoate,
methyl 2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-
yl)benzoate,

[2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)phenoxy]acetic acid,

2-amino-6-phenylnicotinonitrile,

2-amino-6-cyclohexylnicotinonitrile,

5 2-amino-4-(2-furyl)-6-(1-trityl-1H-pyrazol-4-yl)nicotinonitrile, and

2-amino-4-(2-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,

8. The compound according to claim 1, wherein the

aminocyanopyridine MK-2 inhibiting compound comprises at least one compound that is selected from the group consisting of:

10 2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

15 8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,

2-amino-3-cyano-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,

4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxamide,

2-amino-4-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

20 2-amino-6-(2-furyl)-4-(1-methyl-1H-imidazol-4-yl)nicotinonitrile,

8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,

2-amino-4-(2-furyl)-8-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,

2-amino-4-(2,6-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

25 2-amino-6-(4-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,

2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile, 2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,

2-amino-4-(2-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,

4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoic acid,

30 2-amino-6-(2-furyl)-4-(1H-imidazol-5-yl)nicotinonitrile,

2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,

- 2-amino-3-cyano-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,
2-amino-6-(3-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-6-(2-furyl)-4-(1H-imidazol-4-yl)nicotinonitrile,
5 2-amino-4-(2,4-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile, 4,6-diamino-2-(trifluoromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(2-furyl)-6,8-dihydro-5H-pyrrolo[3,4-h]quinoline-3-carbonitrile,
4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoic acid,
10 2-amino-4-(2-furyl)-5,6-dihydro-1,8-phenanthroline-3-carbonitrile,
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
2-amino-4-(1-methyl-1H-imidazol-4-yl)-6-phenylnicotinonitrile,
2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,
4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoic acid,
15 2-amino-4-(3-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
N-{4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenyl}methanesulfonamide,
2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrrolo[2,3-h]quinoline-3-carbonitrile,
20 2-amino-4-(1H-imidazol-5-yl)-6-phenylnicotinonitrile,
2-amino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(1H-imidazol-5-yl)-6-(4-methoxyphenyl)nicotinonitrile,
2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(2-furyl)-6-(1H-pyrazol-4-yl)nicotinonitrile,
25 2-amino-4-(4-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(2,5-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(4-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
30 carbonitrile,
2-amino-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,

- 4,6-diamino-2-(chloromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
2-amino-4-(1H-imidazol-4-yl)-6-phenylnicotinonitrile,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzenesulfonamide,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenylboronic acid,
5 2-amino-6-(4-methoxyphenyl)-4-(4H-1,2,4-triazol-3-yl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(3-furyl)nicotinonitrile,
2-amino-6-(2-furyl)-4-(methylthio)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,
8-amino-6-(2-furyl)-4,5-dihydro-2H-pyrazolo[4,3-h]quinoline-7-carbonitrile,
10 2-amino-4-(2-bromophenyl)-6-(2-furyl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,
2-amino-4-phenyl-6-thien-2-yl nicotinonitrile,
2-amino-4-(3-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
15 2-amino-4-(2-furyl)-7-methyl-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
2-amino-4-(2-fluorophenyl)-6-(1H-pyrrol-2-yl)nicotinonitrile,
2-amino-4-(2-furyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
20 2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-3-yl)nicotinonitrile,
3-amino-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,
N-[4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-
yl)phenyl]acetamide,
6-amino-4-[(4-methoxyphenyl)amino]-2-(trifluoromethyl)-2,3-
25 dihydrofuro[2,3-b]pyridine-5-carbonitrile,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]-*N*-(tert-
butyl)benzenesulfonamide,
4,6-diamino-2-ethyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
6-amino-4-(2-furyl)-2,4'-bipyridine-5-carbonitrile,
30 2,4-diamino-6-(methylthio)nicotinonitrile,
3-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic
acid,

- 2-amino-6-(4-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(1,3-benzodioxol-4-yl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile, 4,6-diamino-2-methyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
- 5 2-amino-4-(1H-imidazol-5-yl)-6-[4-(methylsulfonyl)phenyl]nicotinonitrile,
2,4-diaminoquinoline-3-carbonitrile,
2,8-diamino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4,6-di(2-furyl)nicotinonitrile,
4,6-diamino-2-butyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
- 10 ethyl 4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoate,
2,4-diamino-6-methoxynicotinonitrile,
2-amino-4-methylnicotinonitrile,
2-amino-4-(4-cyanophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
- 15 2-amino-4-cyclopropyl-6-methylnicotinonitrile,
2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-2-yl)nicotinonitrile,
2-amino-4-(2-chlorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-6-(2-furyl)-4-(4-phenoxyphenyl)nicotinonitrile,
- 20 2-amino-4-pyridin-3-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-6-[[2-(4-chlorophenyl)-2-oxoethyl]thio]-4-(2-furyl)pyridine-3,5-dicarbonitrile,
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,
- 25 2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-4-yl)nicotinonitrile,
4-(6-amino-5-cyano-4-phenylpyridin-2-yl)-N-(tert-butyl)benzenesulfonamide,
2-amino-4-methoxynicotinonitrile,
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]benzoic acid,
- 30 4,6-diamino-2-[(4-methoxyphenoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile, 2-amino-4-(2-fluorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,

4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]-*N*-(tert-butyl)benzenesulfonamide, (2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,
3-pyridinecarbonitrile, 2-amino-4-methylm
5 2-amino-6-(2-furyl)nicotinonitrile,
2-amino-4-(2-furyl)-6-(3-hydroxyphenyl)nicotinonitrile,
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzamide,
2-amino-4-(2-furyl)-7-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(2-furyl)-6-(1H-indol-3-yl)nicotinonitrile,
10 2-amino-4-pyridin-4-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(3-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,
2-amino-4-[2-(difluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
15 2-amino-4-(2-furyl)-6-thien-3-ylnicotinonitrile,
2-amino-4-(3-fluorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,
2-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,
2,4-diamino-6-propylpyridine-3,5-dicarbonitrile, and
prodrugs, salts, tautomers, and combinations thereof.

20 9. The compound according to claim 1, wherein the aminocyanopyridine MK-2 inhibiting compound comprises at least one compound that is selected from the group consisting of:

2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
25 2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,
2-amino-3-cyano-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic
30 acid,
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxamide,
2-amino-4-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

- 2-amino-6-(2-furyl)-4-(1-methyl-1H-imidazol-4-yl)nicotinonitrile,
8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,
2-amino-4-(2-furyl)-8-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(2,6-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
5 carbonitrile,
2-amino-6-(4-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,
2-amino-4-(2-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
10 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoic acid,
2-amino-6-(2-furyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,
2-amino-3-cyano-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-8-
carboxylic acid,
15 2-amino-6-(3-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
2-amino-6-(2-furyl)-4-(1H-imidazol-4-yl)nicotinonitrile,
2-amino-4-(2,4-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile, 4,6-diamino-2-(trifluoromethyl)-2,3-dihydrofuro[2,3-b]pyridine-
5-carbonitrile,
20 2-amino-4-(2-furyl)-6,8-dihydro-5H-pyrrolo[3,4-h]quinoline-3-carbonitrile,
4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoic acid,
2-amino-4-(2-furyl)-5,6-dihydro-1,8-phenanthroline-3-carbonitrile,
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
2-amino-4-(1-methyl-1H-imidazol-4-yl)-6-phenylnicotinonitrile,
25 2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,
4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoic acid,
2-amino-4-(3-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
30 *N*-{4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenyl}methanesulfonamide,
2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrrolo[2,3-h]quinoline-3-carbonitrile,
2-amino-4-(1H-imidazol-5-yl)-6-phenylnicotinonitrile,

2-amino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
2-amino-4-(1H-imidazol-5-yl)-6-(4-methoxyphenyl)nicotinonitrile, and
prodrugs, salts, tautomers, and combinations thereof.

5 10. The compound according to claim 1, wherein the
aminocyanopyridine MK-2 inhibiting compound comprises at least one
compound that is selected from the group consisting of:

2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,

10 2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-
carbonitrile,

8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,
and prodrugs, salts, tautomers, and combinations thereof.

15 11. The compound according to claim 1, wherein the compound
is capable of inhibiting the activity of mitogen activated protein kinase
activated protein kinase-2.

12. The compound according to claim 1, having an MK-2
inhibition IC_{50} of below 200 μM .

20 13. The compound according to claim 1, having an MK-2
inhibition IC_{50} of below 10 μM .

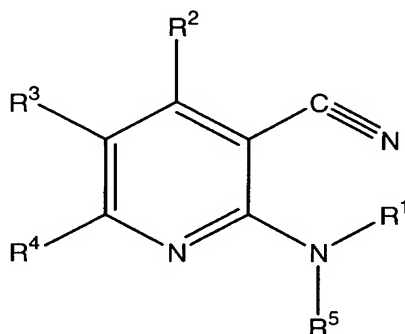
14. The compound according to claim 1, having a $TNF\alpha$ release
 IC_{50} value of below 200 μM in an *in vitro* cell assay.

15. The compound according to claim 1, having a $TNF\alpha$ release
 IC_{50} values of below 5 μM in an *in vitro* cell assay.

25 16. The compound according to claim 1, wherein the
aminocyanopyridine MK-2 inhibiting compound provides a degree of
inhibition of $TNF\alpha$ in a rat LPS assay of at least about 25%.

30 17. The compound according to claim 1, wherein the
aminocyanopyridine MK-2 inhibiting compound provides a degree of
inhibition of $TNF\alpha$ in a rat LPS assay of above 80%.

18. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an aminocyanopyridine compound, or a pharmaceutically acceptable salt or tautomer or isomer thereof, the compound having the structure:



5

wherein:

R¹ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ alkylamino, C₁-C₄ alkyl, di-(C₁-C₄ alkyl)amino C₁-C₄ alkyl, C₁-C₄ alkyl-C₁-C₄ alkyl, hydroxy C₁-C₄ alkyl, and aryl C₁-C₄ alkylcarbonyl;

10

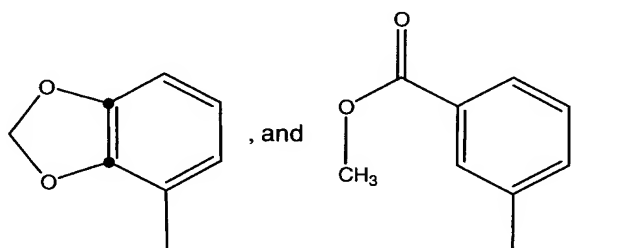
R² is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkylamino, aryl, heteroaryl, heterocyclyl, carboxy, carboxy C₁-C₄ alkyl, C₁-C₄ alkoxy, hydroxy, hydroxy C₁-C₄ alkyl, hydroxy C₁-C₄ alkylamino, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkyl, C₁-C₄ alkoxy C₁-C₄ alkylamino, amino C₁-C₄ alkylamino, aryl C₁-C₄ alkyl, C₁-C₄ alkylamino C₁-C₄ alkyl, di C₁-C₄ alkylamino C₁-C₄ alkyl, C₁-C₄ alkyl C₁-C₄ alkyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkylcarbonyl, phthalamino C₁-C₄ alkyl, halo, carbamyl, C₁-C₄ alkylthio, C₁-C₄ alkoxyarylamino, C₁-C₁₀ mono- and bicyclic cycloalkyl, wherein aryl, heteroaryl, heterocyclyl, mono- and bicyclic cycloalkyl are optionally substituted with one or more of the groups selected from halogen, hydroxy, C₁-C₄ alkoxy, aryloxy, C₂-C₄ alkenyloxy, C₂-C₄ alkynyloxy, C₁-C₄ alkyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, C₁-C₄

15

20

alkoxycarbonyl C₁-C₄ alkoxy, carboxy C₁-C₄ alkoxyamino, C₁-C₄
alkylamino, di-C₁-C₄ alkylamino, *N*-C₁-C₄ alkyl-*N*-cyano C₁-C₄ alkylamino,
nitro, C₁-C₄ alkylcarbonylamino, cyano, halo C₁-C₄ alkyl, di-halo C₁-C₄
alkyl, tri-halo C₁-C₄ alkyl, hydroxy C₁-C₄ alkoxy, halo C₁-C₄ alkoxy, tri-halo
C₁-C₄ alkoxy,

5

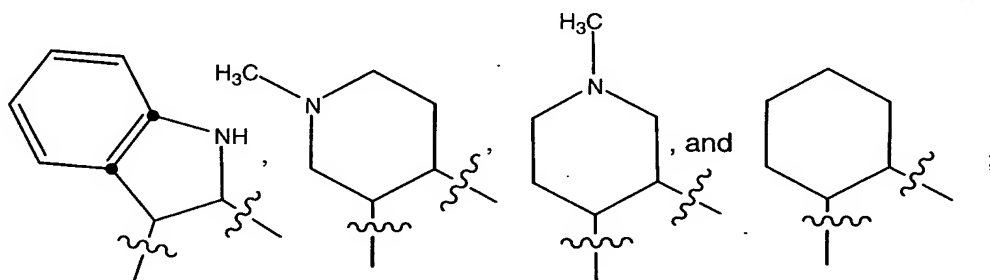


with the proviso that when R² is aryl, it is not substituted with nitro;

R³ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆
alkenyl, C₂-C₆ alkynyl, cyano, amino C₁-C₄ alkyl, amino, aryl, wherein the
aryl group is optionally substituted with one or more group selected from
halogen, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkyl, carboxy, C₁-C₄
alkoxycarbonyl, carboxy C₁-C₄ alkoxy, amino, di- C₁-C₄ alkylamino, *N*-C₁-
C₄ alkyl-*N*-cyano C₁-C₄ alkylamino, nitro, C₁-C₄ alkylcarbonylamino, cyano,
halo C₁-C₄ alkyl, di-halo C₁-C₄ alkyl, tri-halo C₁-C₄ alkyl, halo C₁-C₄ alkoxy,
di-halo C₁-C₄ alkoxy, tri-halo C₁-C₄ alkoxy, except that when R² is
heteroaryl, R³ is other than cyano, and

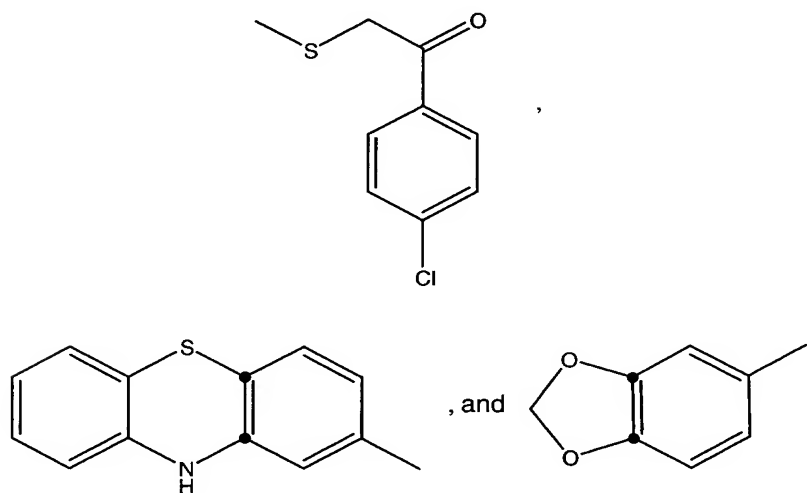
15

where the R² and R³ groups are such that they optionally join to
form a ring system selected from:

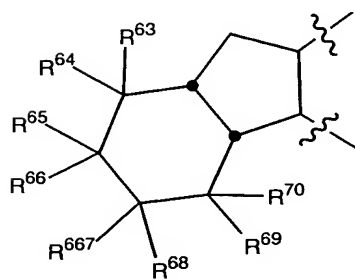
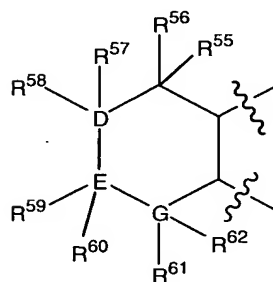
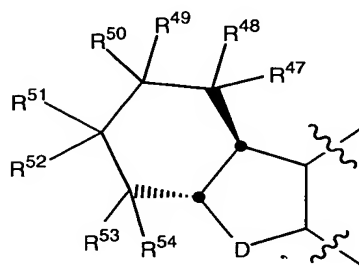
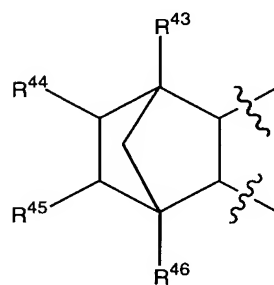
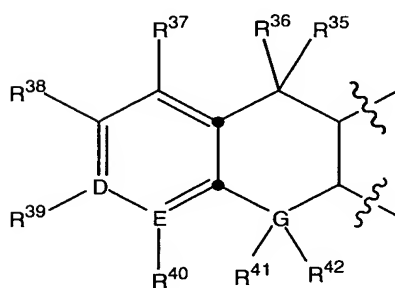
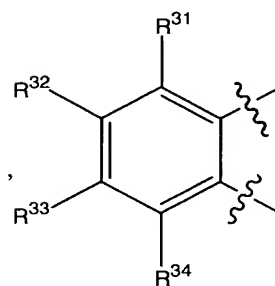
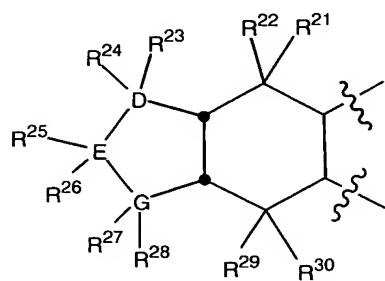
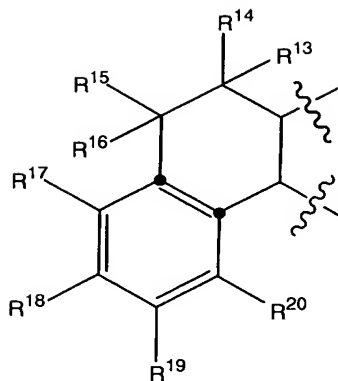
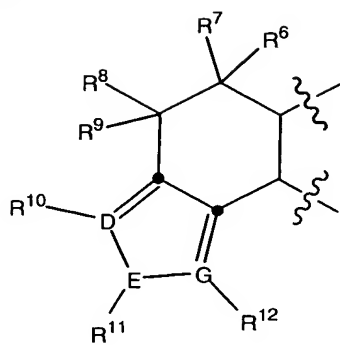


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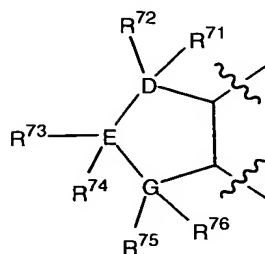
R^4 is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, hydroxy, C₁-C₄ alkylthio, C₁-C₄ alkoxy, C₁-C₄ alkoxycarbonyl, mercapto, *N*-imidazolylphenyl, C₁-C₄ isoalkyl, aminofluorobenzhydryl, aryl and heteroaryl, wherein the aryl and heteroaryl groups optionally are substituted with one or more groups selected from halogen, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfonyl, C₁-C₄ alkylsulfinyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, carboxy C₁-C₄ alkyl, carboxy C₁-C₄ alkoxy, amino, di-C₁-C₄ alkylamino, *N*-C₁-C₄ alkyl-*N*-cyano C₁-C₄ alkylamino, nitro, C₁-C₄ alkylcarbonylamino, cyano, halo C₁-C₄ alkyl, di-halo C₁-C₄ alkyl, tri-halo C₁-C₄ alkyl, halo C₁-C₄ alkoxy, di-halo C₁-C₄ alkoxy, tri-halo C₁-C₄ alkoxy



wherein the R^3 and R^4 groups are such that they optionally join to form a ring system selected from:



, and



;

D, E and G are each independently selected from carbon, oxygen, sulfur, and nitrogen;

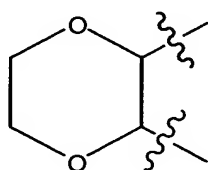
R⁵ is selected from the group consisting of -H, and C₁-C₅ alkyl, provided that at least one of R¹, R², R³, R⁴ and R⁵ is other than hydrogen;

5 and

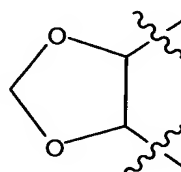
wherein the R¹ and R⁵ groups optionally join to form a piperidyl ring or a oxaxinyl ring;

10 R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³, R⁴⁴, R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰, R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰, R⁷¹, R⁷², R⁷³, R⁷⁴, R⁷⁵, and R⁷⁶ are each optionally present and are each independently selected from the group consisting of -H, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ isoalkyl, amino, nitro, hydroxy, 15 C₁-C₄ alkoxy, C₁-C₄ alkenoxy, oxo, carboxy, halo, halo C₁-C₄ alkyl, dihalo C₁-C₄ alkyl, trihalo C₁-C₄ alkyl, cyano, cyano C₁-C₄ alkyl, dicyano C₁-C₄ alkyl, halophenyl, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkoxy, - (CH₂)-O-(C₆H₄)-O-(CH₃), carboxy C₁-C₄ alkoxy, C₁-C₄ alkylcarboxy C₁-C₄ alkoxy, C₁-C₄ alkoxyamino, C₁-C₄ alkylamino, di C₁-C₄ alkylamino, tri C₁- 20 C₄ alkylamino, amino C₁-C₄ alkoxy, diamino C₁-C₄ alkoxy, C₁-C₄ alkylamino C₁-C₄ alkoxy, di C₁-C₄ alkylamino C₁-C₄ alkoxy, cyano C₁-C₄ alkoxy C₁-C₄ alkyl, -(CH₂)-O-(CF₂)-CHF₂, tetra C₁-C₄ alkoxy C₁-C₄ alkyl, phenyl, benzyl, benzoyl, aryl, *N*-morpholinyl, morpholinyl C₁-C₄ alkoxy, pyrrolidyl C₁-C₄ alkoxy, *N*-pyrrolidyl C₁-C₄ alkoxy, C₁-C₄ alkylcarboxy, 25 carboxy C₁-C₄ alkyl - ethyl ester, pyridyl C₁-C₄ alkyl, pyridyl C₁-C₄ alkoxy, - COO-CH₂-CH₃, with the proviso that when E is -N-, R³⁸ is not cyano, and that when G is -N-, R³⁶ is -H; and

wherein R³⁸ and R³⁹ are such that they optionally join to form a ring system of the type selected from:



, and



;

with the proviso that when R^1 , R^3 and R^5 are hydrogen:

R^2 is other than alkenyl, alkyl, alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heterocyclealkylcarbonyl, (NZ₁Z₂)alkyl, or -R_AR_B;

where Z₁ and Z₂ are each independently selected from the group consisting of hydrogen, alkoxy carbonyl, alkyl, alkylcarbonyl, benzyl, benzyloxy carbonyl, and formyl;

R^A is selected from the group consisting of aryl and arylalkyl;

R^B is selected from the group consisting of aryl, arylalkoxy, arylalkyl, aryloxy, heterocycle, and heterocyclealkyl; and

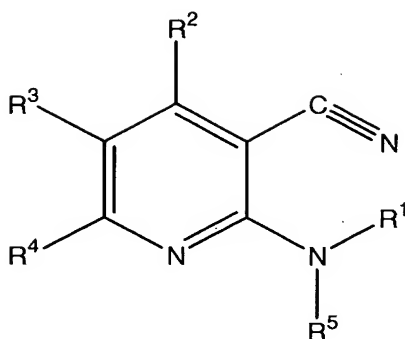
R⁴ is other than alkenyl, alkoxyalkynyl, alkyl, alkynyl, cycloalkyl, aryl, arylalkyl, heterocycle, heterocyclealkyl, or -R_CR_DR_E;

where R_C is selected from the group consisting of aryl, arylalkyl, heterocycle and heterocyclealkyl;

R_D is selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl; and

R_E is absent or selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl.

19. A kit for the purpose of treating a TNF α mediated disease or disorder, the kit comprising a dosage form comprising at least one aminocyanopyridine compound, or a pharmaceutically acceptable salt thereof, the compound having the structure:

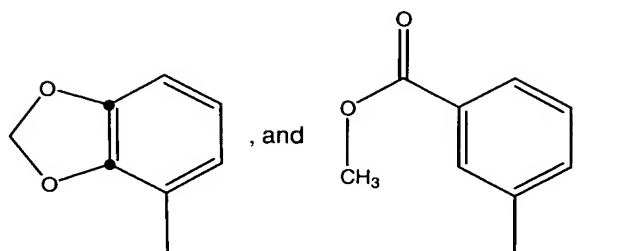


wherein:

R¹ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkyl, amino, amino
5 C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ alkylamino, C₁-C₄ alkyl, di-(C₁-C₄ alkyl)amino C₁-C₄ alkyl, C₁-C₄ alkyl-C₁-C₄ alkyl, hydroxy C₁-C₄ alkyl, and aryl C₁-C₄ alkylcarbonyl;

R² is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkylamino, aryl,
10 heteroaryl, heterocyclyl, carboxy, carboxy C₁-C₄ alkyl, C₁-C₄ alkoxy, hydroxy, hydroxy C₁-C₄ alkyl, hydroxy C₁-C₄ alkylamino, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkyl, C₁-C₄ alkoxy C₁-C₄ alkylamino, amino C₁-C₄ alkylamino, aryl C₁-C₄ alkyl, C₁-C₄ alkylamino C₁-C₄ alkyl, di C₁-C₄ alkylamino C₁-C₄ alkyl, C₁-C₄ alkyl C₁-C₄ alkyl, carboxy C₁-C₄ alkyl, aryl
15 C₁-C₄ alkylcarbonyl, phthalamino C₁-C₄ alkyl, halo, carbamyl, C₁-C₄ alkylthio, C₁-C₄ alkoxyaryl amino, C₁-C₁₀ mono- and bicyclic cycloalkyl, wherein aryl, heteroaryl, heterocyclyl, mono- and bicyclic cycloalkyl are optionally substituted with one or more of the groups selected from
20 halogen, hydroxy, C₁-C₄ alkoxy, aryloxy, C₂-C₄ alkenyloxy, C₂-C₄ alkynyloxy, C₁-C₄ alkyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, C₁-C₄ alkoxycarbonyl C₁-C₄ alkoxy, carboxy C₁-C₄ alkoxyamino, C₁-C₄ alkylamino, di-C₁-C₄ alkylamino, *N*-C₁-C₄ alkyl-*N*-cyano C₁-C₄ alkylamino, nitro, C₁-C₄ alkylcarbonylamino, cyano, halo C₁-C₄ alkyl, di-halo C₁-C₄

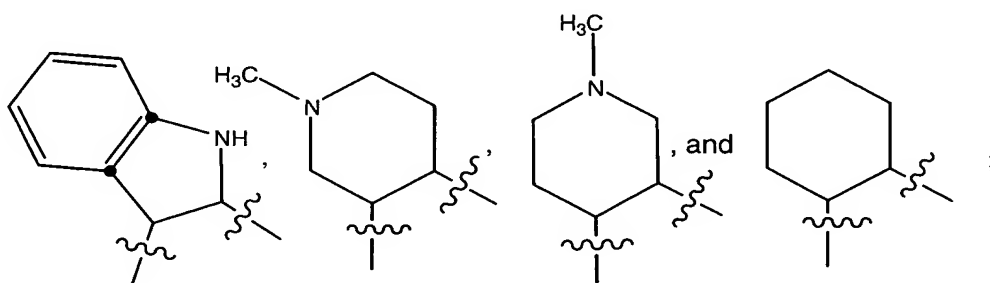
alkyl, tri-halo C₁-C₄ alkyl, hydroxy C₁-C₄ alkoxy, halo C₁-C₄ alkoxy, tri-halo C₁-C₄ alkoxy,



5 with the proviso that when R² is aryl, it is not substituted with nitro;

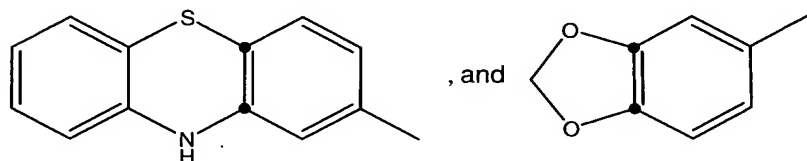
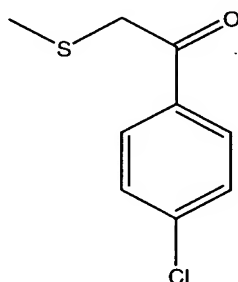
R³ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, cyano, amino C₁-C₄ alkyl, amino, aryl, wherein the aryl group is optionally substituted with one or more group selected from halogen, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkyl, carboxy, C₁-C₄ alkoxycarbonyl, carboxy C₁-C₄ alkoxy, amino, di- C₁-C₄ alkylamino, *N*-C₁-C₄ alkyl-*N*-cyano C₁-C₄ alkylamino, nitro, C₁-C₄ alkylcarbonylamino, cyano, halo C₁-C₄ alkyl, di-halo C₁-C₄ alkyl, tri-halo C₁-C₄ alkyl, halo C₁-C₄ alkoxy, di-halo C₁-C₄ alkoxy, tri-halo C₁-C₄ alkoxy, except that when R² is heteroaryl, R³ is other than cyano, and

15 where the R² and R³ groups are such that they optionally join to form a ring system selected from:

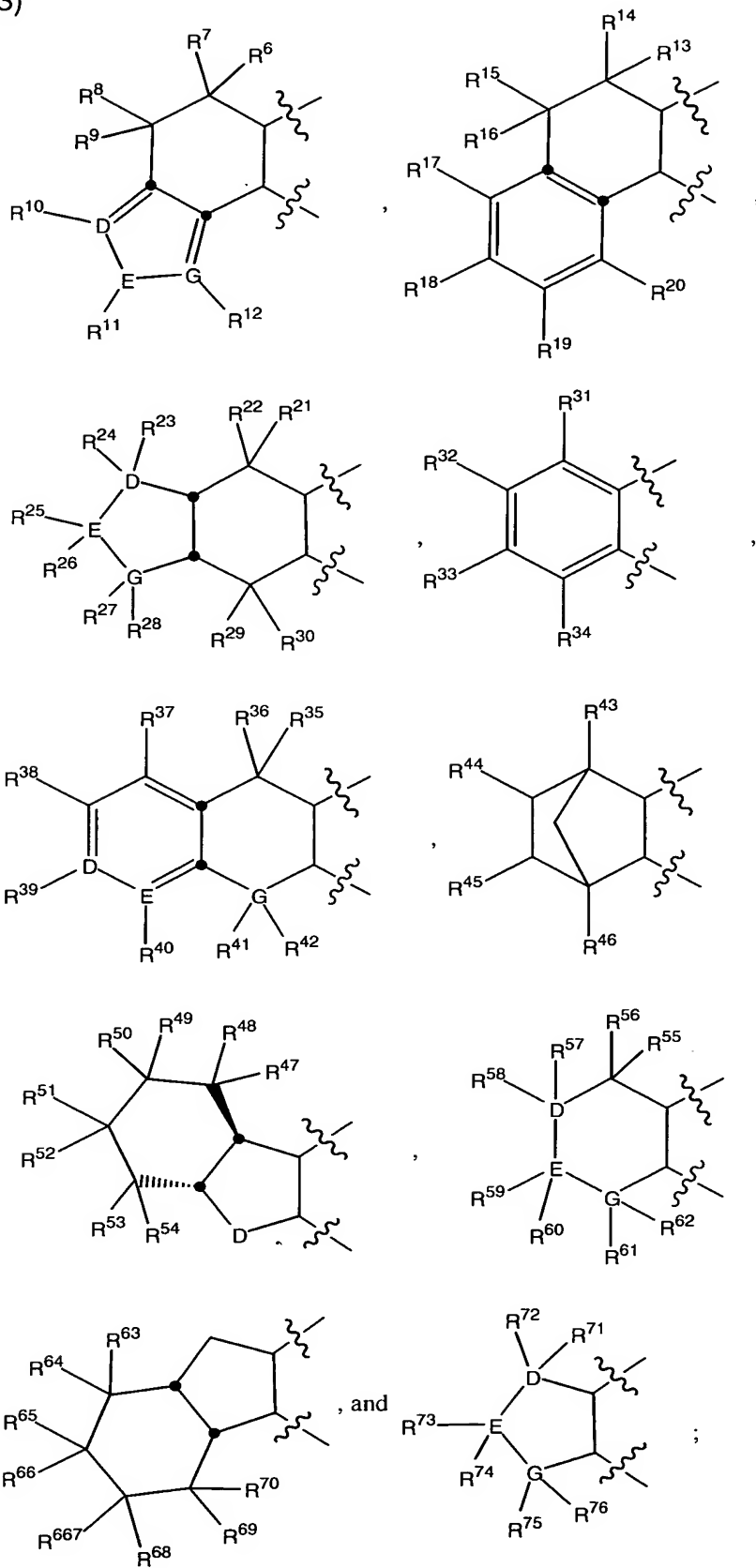


R⁴ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, hydroxy, C₁-C₄ alkylthio, C₁-C₄ alkoxy, C₁-C₄ alkoxycarbonyl, mercapto, *N*-imidazolylphenyl, C₁-C₄ isoalkyl, aminofluorobenzhydryl, aryl and heteroaryl, wherein the aryl and

heteroaryl groups optionally can be substituted with one or more groups selected from halogen, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfonyl, C₁-C₄ alkylsulfinyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, carboxy C₁-C₄ alkyl, carboxy C₁-C₄ alkoxy, amino, di- C₁-C₄ alkylamino, *N*-C₁-C₄ alkyl-*N*-cyano C₁-C₄ alkylamino, nitro, C₁-C₄ alkylcarbonylamino, cyano, halo C₁-C₄ alkyl, di-halo C₁-C₄ alkyl, tri-halo C₁-C₄ alkyl, halo C₁-C₄ alkoxy, di-halo C₁-C₄ alkoxy, tri-halo C₁-C₄ alkoxy



wherein the R³ and R⁴ groups are such that they can join to form a ring system selected from:



D, E and G are each independently selected from carbon, oxygen, sulfur, and nitrogen;

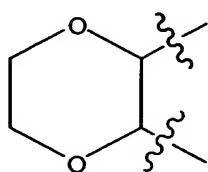
R⁵ is selected from the group consisting of -H, and C₁-C₅ alkyl, provided that at least one of R¹, R², R³, R⁴ and R⁵ is other than hydrogen;

and

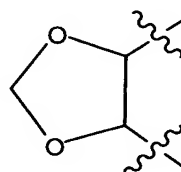
wherein the R¹ and R⁵ groups optionally join to form a piperidyl ring or a oxaxinyl ring;

R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³, R⁴⁴, R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰, R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰, R⁷¹, R⁷², R⁷³, R⁷⁴, R⁷⁵, and R⁷⁶ are each optionally present and are each independently selected from the group consisting of -H, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ isoalkyl, amino, nitro, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkenoxy, oxo, carboxy, halo, halo C₁-C₄ alkyl, dihalo C₁-C₄ alkyl, trihalo C₁-C₄ alkyl, cyano, cyano C₁-C₄ alkyl, dicyano C₁-C₄ alkyl, halophenyl, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkoxy, -(CH₂)-O-(C₆H₄)-O-(CH₃), carboxy C₁-C₄ alkoxy, C₁-C₄ alkylcarboxy C₁-C₄ alkoxy, C₁-C₄ alkoxyamino, C₁-C₄ alkylamino, di C₁-C₄ alkylamino, tri C₁-C₄ alkylamino, amino C₁-C₄ alkoxy, diamino C₁-C₄ alkoxy, C₁-C₄ alkylamino C₁-C₄ alkoxy, di C₁-C₄ alkylamino C₁-C₄ alkoxy, cyano C₁-C₄ alkoxy C₁-C₄ alkyl, -(CH₂)-O-(CF₂)-CHF₂, tetra C₁-C₄ alkoxy C₁-C₄ alkyl, phenyl, benzyl, benzoyl, aryl, *N*-morpholinyl, morpholinyl C₁-C₄ alkoxy, pyrrolidyl C₁-C₄ alkoxy, *N*-pyrrolidyl C₁-C₄ alkoxy, C₁-C₄ alkylcarboxy, carboxy C₁-C₄ alkyl - ethyl ester, pyridyl C₁-C₄ alkyl, pyridyl C₁-C₄ alkoxy, -COO-CH₂-CH₃, with the proviso that when E is -N-, R³⁸ is other than cyano, and that when G is -N-, R³⁶ is -H; and

wherein R³⁸ and R³⁹ are such that they optionally join to form a ring system of the type selected from:



, and



;

with the proviso that when R^1 , R^3 and R^5 are hydrogen:

R^2 is other than alkenyl, alkyl, alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heterocyclealkylcarbonyl, (NZ₁Z₂)alkyl, or -R_AR_B;

where Z₁ and Z₂ are each independently selected from the group consisting of hydrogen, alkoxycarbonyl, alkyl, alkylcarbonyl, benzyl, benzyloxycarbonyl, and formyl;

R^A is selected from the group consisting of aryl and arylalkyl;

R^B is selected from the group consisting of aryl, arylalkoxy, arylalkyl, aryloxy, heterocycle, and heterocyclealkyl; and

R⁴ is other than alkenyl, alkoxyalkynyl, alkyl, alkynyl, cycloalkyl, aryl, arylalkyl, heterocycle, heterocyclealkyl, or -R_CR_DR_E;

where R_C is selected from the group consisting of aryl, arylalkyl, heterocycle and heterocyclealkyl;

R_D is selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl; and

R_E is absent or selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl.